

## NSFL030J10 192V30Ah

### LiFePO<sub>4</sub> Lithium Battery

**Longer Cycle Life:** Offers up to 15 times longer cycle life and 5 times longer float/calendar life than lead acid battery.

**Lighter Weight:** About 40% weight of a comparable lead acid battery, save up to 60% in weight.

**Quick Charge:** Short charge time compared with lead acid battery.

**Low Self-Discharge:** Lower self-discharge compared with lead acid battery, longer storage time without recharging.

**Superior Safety:** Multi-protection methods built inside to protect the battery from overcharge, over discharge and short circuit situation.

**High Efficient:** Higher round-trip energy efficiency of the average (92%) than lead acid battery 80% (discharge from 100% to 0% and back to 100% charged).



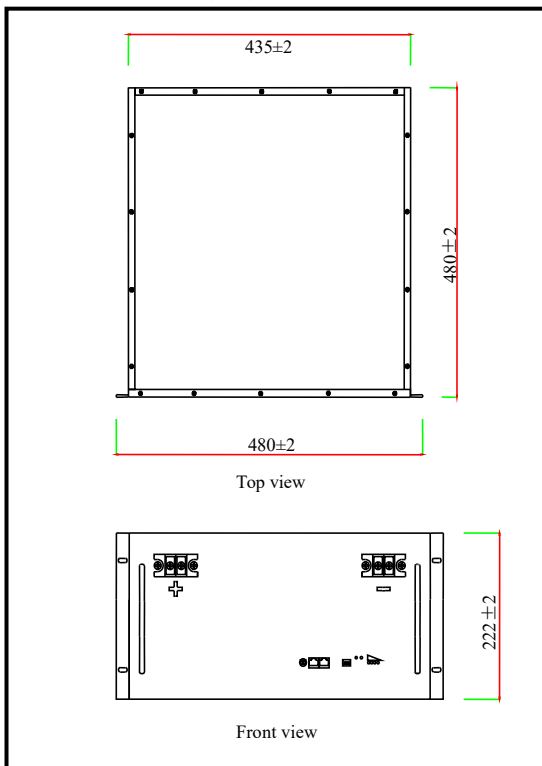
#### ● Specifications

|                  |              |                        |
|------------------|--------------|------------------------|
| Nominal voltage  |              | 192V                   |
| Nominal capacity |              | 30Ah                   |
| Dimensions       | Length       | 480±2mm (18.89inch)    |
|                  | Width        | 480±2mm (18.89inch)    |
|                  | Height       | 222±2mm (8.74inch)     |
|                  | Total height | 222±2mm (8.74inch)     |
| Approx. weight   |              | 56.5kg (124.56lbs)±3kg |

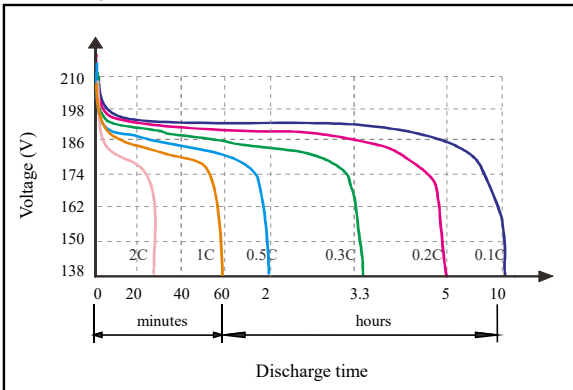
#### ● Characteristics

|   |                                  |   |
|---|----------------------------------|---|
| Electrical Parameters (25°C)              | Rated Voltage                    | 192V  |
|   | Rated Capacity (C <sub>5</sub> ) | 30Ah@25°C   |
|   | Energy                           | 5760Wh  |
|   | Months Self Discharge            | <3%   |
|   | Charge Efficiency                | 99.5%@ 0.2C   |
|   | Discharge Efficiency             | 96-99%@ 1C  |
| Terminal Diameter                         |                                  | M8  |
| Internal resistance (Fully charged, 25°C) |                                  | ≤300mΩ  |
| Cycle life                                |                                  | >3000 cycles @ 0.2C 100%D.O.D   |
| Capacity affected by temperature          | 40°C                             | 101%  |
|   | 25°C                             | 100%  |
|   | 0°C                              | 90%   |
|   | -10°C                            | 75%   |
| Nominal operating temperature             |                                  | 25°C±3°C (77°F±5°F)   |
| Operating temperature range               | Discharge                        | -20°C~60°C (-4°F~140°F)   |
|   | Charge                           | 0°C~45°C (32°F~113°F)   |
|   | Storage                          | 0°C~40°C (32°F~104°F)   |
| Water Dust Resistance                     |                                  | IP50  |
| Charge Voltage                            |                                  | 216V  |
| Standard Charge Mode (25°C±2°C, <75%RH)   |                                  | 0.2CA Constant Current to 216V, then Constant Voltage 216V until the current drops to 0.02CA, before use, rest 30 minutes |
| Charge Current                            |                                  | 6A  |
| Maximum Charge Current                    |                                  | 15A   |
| Charge Cut off Voltage                    |                                  | 219V  |
| Continuous Discharge Current              |                                  | 30A   |
| Maximum Pulse Current                     |                                  | 90A (<10ms)   |
| Discharge Cut Off Voltage                 |                                  | 180V  |
| Communicate Protocol (optional)           |                                  | RS485/RS232   |
| SOC (optional)                            |                                  | LED/PC Software   |
| Application connection                    |                                  | 1 string 1 parallel   |
| Mechanical                                | Cells                            | 60 Strings  |
|   | Container                        | Metal   |

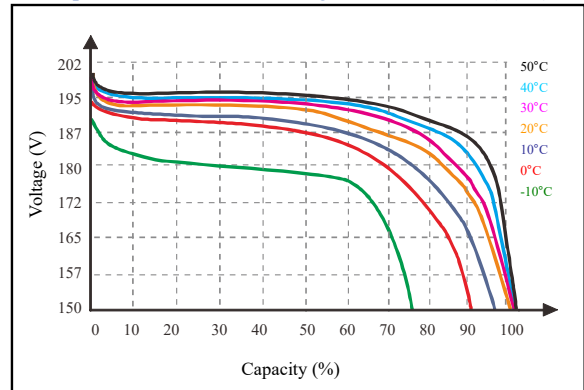
#### ● Outer dimensions (mm)



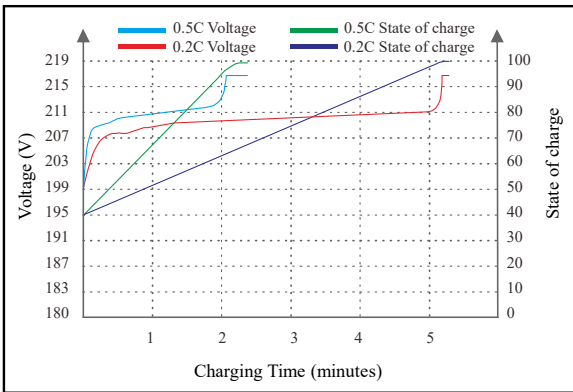
### ● Discharge characteristics (25°C)



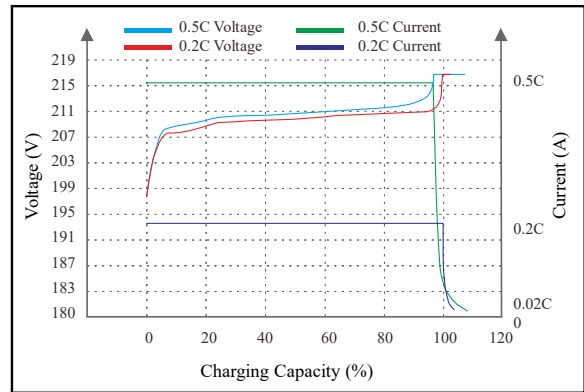
### ● Temperature affect on discharge characteristics (0.5C)



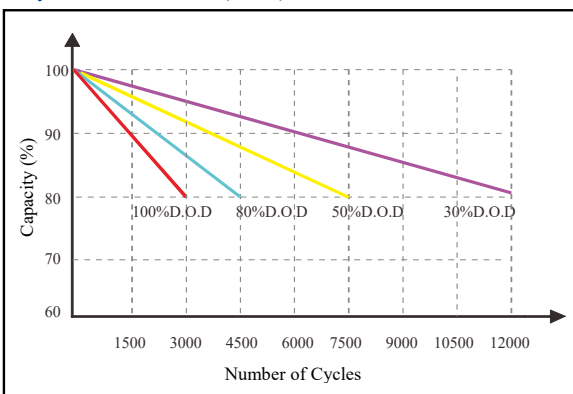
### ● State of Charge Curve (25°C)



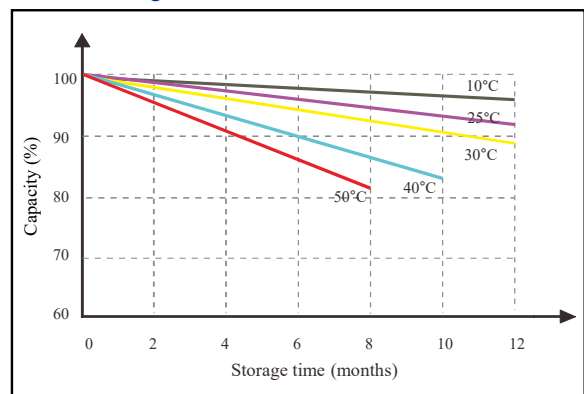
### ● Charge characteristics (25°C)



### ● Cycle life on D.O.D (25°C)



### ● Self Discharge Characteristics Curve



Note 2: The above curves are based on laboratory testing data @ 25°C 40%RH.